

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

EPA Region 5 Records Ctr.



272841

DATE: NOV 28 1994

SUBJECT: ON-SCENE COORDINATOR'S REPORT - Removal Action at the Automatic Industrial Plating Site, 920 Morse Avenue, Schaumburg, Illinois. Site ID #PV.

FROM: Rick Karl, Chief *R. Karl*
Emergency and Enforcement Response Branch, HSE-5J

TO: Debbie Dietrich, Acting Director
Emergency Response Division

THRU: Jodi L. Traub, Associate Division Director
Office of Superfund, HS-6J

Attached please find the On-Scene Coordinator's Report for the removal action conducted at the Automatic Industrial Plating site located in Schaumburg, Cook County, Illinois. The report follows the format outlined in the National Contingency Plan (NCP), Section 300.165. This removal began on December 26, 1991 and was completed on July 9, 1992. The OSC for this removal action was Stavros Emmanouil.

The site posed an immediate threat to human health and the environment. The action was taken to mitigate threats posed by cyanide bearing waste, heavy metal contaminants, acids and caustics. Site assessment activities documented the presence of two hundred and twenty-one open, leaking, and unsecured containers. Site access was unrestricted.

Costs under the control of the On-Scene Coordinator totaled \$718,065 of which \$618,237 were for the Emergency Response Cleanup Services (ERCS) contractor.

Any indication in this OSC Report of specific costs incurred at the site is only an approximation, subject to audit and final definitization by the U.S. EPA. The OSC Report is not a final reconciliation of the costs associated with a particular site.

Portions of the OSC Report appendices may contain confidential business or enforcement-sensitive information and must be reviewed by the Office of Regional Counsel prior to release to the public.

This site is not on the National Priorities List.

Attachment

cc: Donald Klopke, Illinois EPA, w/OSC Report
T. Johnson, U.S EPA, OERR, OS-210, w/OSC Report

bcc: B. Wester, CS-29A, w/OSC Report
T. Lesser, P-19J, w/OSC Report
O. Warnsley, CRU, HSM-5J, w/OSC Report
(U.S. EPA State Coordinator), R-19, w/OSC Report
R. Mayhugh, HSC-9J, w/OSC Report
B. Ramsey, Secretary, NRT, OS-120
S. Emmanouil, w/OSC Report
R. Karl, w/OSC Report
J. Cisneros, ESS, w/OSC Report
D. Bruce (RS2), w/OSC Report
EERB Site File, HSE-5J, w/OSC Report (5)

ON-SCENE COORDINATOR'S REPORT

CERCLA REMOVAL ACTION

AUTOMATIC INDUSTRIAL PLATING

SCHAUMBURG, ILLINOIS

SITE ID # PV

DELIVERY ORDER NO. 7460-05-20

Removal Dates: 12/26/91 - 07/09/92

**Emergency and Enforcement Response Branch
Office of Superfund
Waste Management Division
Region V
United States Environmental Protection Agency**

EXECUTIVE SUMMARY

Site/Location: Schaumburg, Illinois
Removal Dates: 12/26/91 - 07/09/92

INCIDENT DESCRIPTION:

This site, Automatic Industrial Plating, is a defunct electroplating facility located at 920 Morse Avenue, Schaumburg, Illinois. Site assessment activities revealed the presence of hundreds of leaking, unsecured containers filled with hazardous materials associated with the electroplating process.

The removal action was taken to mitigate the threats to public health posed by the presence of harmful quantities of cyanide, heavy metals, acids and caustics which were accessible by the public. These materials posed threats through inhalation, ingestion and dermal contact.

ACTIONS TAKEN:

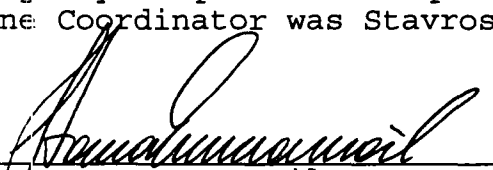
The U.S. EPA began a removal on December 26, 1991. The following emergency removal activities were performed in a four phase process:

- Phase I: ERCS and TAT contractors were mobilized to the site to stabilize and sample all containers, perform compatibility testing, establish and bulk waste streams for disposal acceptance, and secure the site.
- Phase II: Transportation and disposal of three waste groups. Brick and concrete floor cores were submitted for analysis and a cost comparison between disposal and building demolition were researched.
- Phase III: Transportation of two waste stream and demolition of the building.
- Phase IV: Transport and disposal of the remaining three waste streams and the demobilization of the site based on the conclusion of all on-site activities.

One thousand two hundred and sixty-five gallons of cyanide liquids, 3,789 gallons of chrome liquids, and 3,742 gallons of hazardous liquid (contained chromium and cadmium) were transported off-site for treatment. Ten thousand and one hundred pounds of cyanide solids, 8,750 pounds of chrome solids, and 6,300 pounds of caustic solids were shipped off-site for disposal. In addition, 165 gallons of organic liquid, 416 cubic yards of debris, and 40 cubic yards of

RCRA empty crushed drums were also transported for disposal. All actions taken were consistent with the National Contingency Plan.

The removal was completed on 07/09/92, at an estimated cost under control of the OSC of \$ 718,065 of which \$ 618,237 was for the Emergency Response Cleanup Services (ERCS) contractor. The On-Scene Coordinator was Stavros Emmanouil.


Stavros A. Emmanouil On-Scene Coordinator
Emergency and Enforcement Response Branch
United States Environmental Protection Agency
Region V

10/5/94
Date

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Emergency and Enforcement Response Branch
Office of Superfund, U.S. EPA, Region V
OSC REPORT APPENDICES LIST *

Site Name: Automatic Industrial Plating
Site ID#: PV
Delivery Order #: 7460-05-208

1. OPERATIONAL FILES	ID#
- Action Memos/Additional Funding Requests/Time Exemptions	1-A
- POLREPS	1-B
- Site Entry/Exit Log	1-C
- Hot Zone Entry/Exit Log	1-D
- Site Safety Plan	1-E
- Site Log(s)	1-F
- Community Relations Plan	1-G
- Daily Work Orders	1-H
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- General Correspondence/Information	1-J
- Newspaper Articles	1-K
- Site Photos	1-L
2. FINANCIAL FILES	
- Delivery Orders/Procurement Requests Modifications to contract (ERCS)	2-A
- Technical Directive Documents/ Modifications (TAT)	2-B
- Daily Cost Reporting U.S. EPA Form 1900-55's	2-C
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- ERCS Invoices	2-E
- Cost Estimates/RCMS	2-F
3. TECHNICAL FILES	
- TAT Site Assessment	3-A
- Analytical Results/QA/QC	3-B
- Manifests	3-C
- Drum Logs/VAT Logs	3-D
- Compatibility Results	3-E
- Chains of Custody	3-F
- ATSDR Risk Assessment Information	3-G
- Waste Profile Sheets	3-H

* Portions of these OSC Report Appendices may contain confidential business information or enforcement-sensitive information and must be reviewed by the Office of Regional Counsel prior to release to the public.

* Note that certain files for this site are maintained elsewhere by EERB; these appendices are those files maintained by the OSC during the removal action.

1.0 SUMMARY OF EVENTS

1.1.1 Site Location

The Automatic Industrial Plating site is located at 920 Morse Avenue, Schaumburg, Cook County, Illinois (Figure 1). The site, approximately one half acre in area, is located in a mixed residential/industrial setting. The site is bounded on the south by Morse Avenue, and is surrounded by operating industrial facilities on the north, south and west sides (Figure 2).

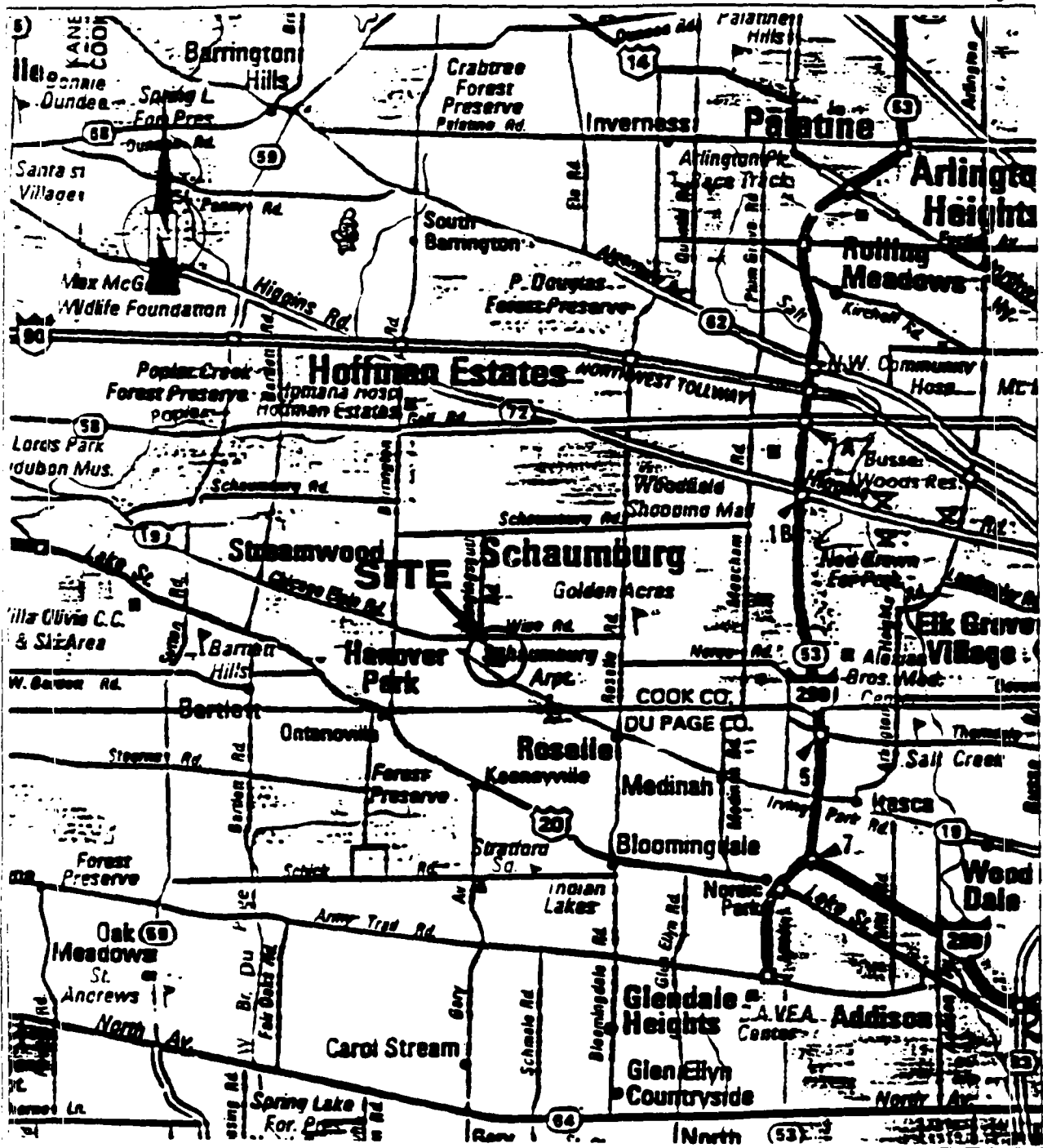
1.1.2 Initial Situation

On December 13, 1991, following a request from the Village of Schaumburg, the Illinois Environmental Protection Agency (IEPA) conducted an investigation of the Automatic Industrial Plating facility. The IEPA documented the presence of hundreds of containers filled with materials associated with the electroplating process. The IEPA conducted a second investigation on December 18, 1991 which included sampling of various on-site containers to determine the composition of waste. The site was referred to the United States Environmental Protection Agency (U.S. EPA) Emergency and Enforcement Response Branch by the IEPA on December 19, 1991.

1.2 Site History

The Automatic Industrial Plating Company, owned by Mr. Wolfgang Damsch, began electroplating operations in 1970. The facility was officially abandoned in July 1991. The site had been the subject of investigations by the Metropolitan Water Reclamation District of Greater Chicago (MWRD).

On December 20, 1991, the U.S. EPA On-Scene Coordinator (OSC) Stavros Emmanouil, and Ecology and Environment, Inc. (E & E) Technical Assistance Team (TAT) conducted a site assessment at the Automatic Industrial Plating site. The TAT inventoried all on-site containers and conducted sampling of several containers for analysis to establish the presence of hazardous materials. In addition, the TAT video documented the initial site condition. Conditions at the facility posed an immediate threat of release of potentially hazardous materials. OSC Emmanouil informed Wolfgang Damsch of the U.S. EPA's presence on-site and of his potential liability as owner/operator of the site. Damsch was given the opportunity to perform removal actions but declined based on insufficient financial funds. On December 26, 1991, OSC Emmanouil, TAT, and Emergency Response Cleanup Services (ERCS) contractors were mobilized to the Automatic Industrial Plating Company to conduct an emergency response action to secure the site. U.S. EPA Emergency & Enforcement Response Branch Chief, Robert Bowden, verbally authorized \$50,000 to stabilize the site.



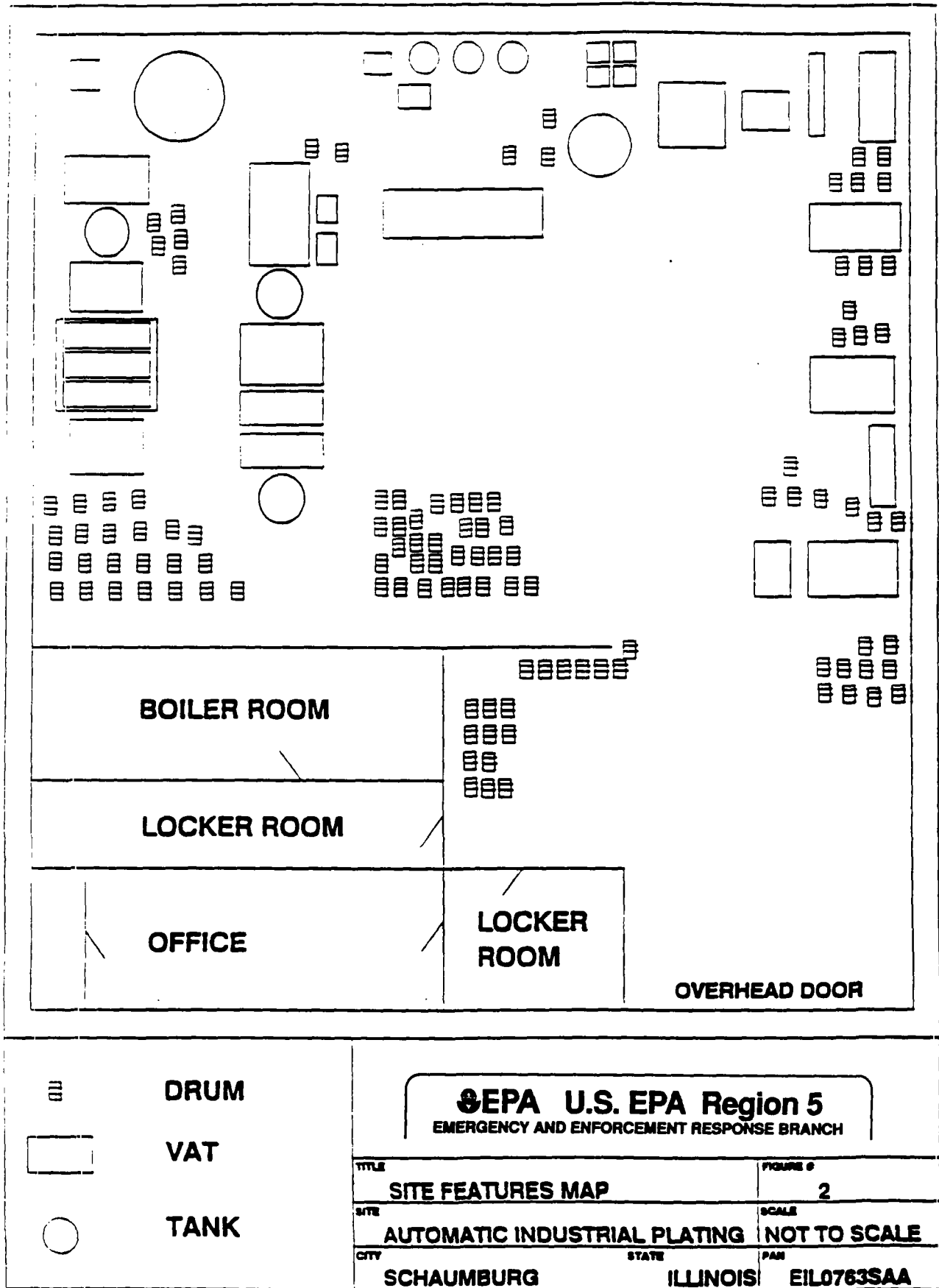
ILLINOIS






EPA U.S. EPA Region 5

EMERGENCY AND ENFORCEMENT RESPONSE BRANCH

TITLE		FIGURE #	
SITE LOCATION MAP		1	
SITE		SCALE	
AUTOMATIC INDUSTRIAL PLATING		1:145000	
CITY	STATE	FAN	
SCHAUMBURG	ILLINOIS	EIL0763SAA	



 **DRUM**
 **VAT**
 **TANK**

SEPA U.S. EPA Region 5
EMERGENCY AND ENFORCEMENT RESPONSE BRANCH

TITLE		FIGURE #
SITE FEATURES MAP		2
SITE		SCALE
AUTOMATIC INDUSTRIAL PLATING		NOT TO SCALE
CITY	STATE	PAN
SCHAUMBURG	ILLINOIS	EIL0763SAA

1.3 Threat to Public Health and the Environment

The conditions documented at the Automatic Industrial Plating Company meet the criteria for a removal action based upon factors set forth in the National Contingency Plan (NCP), 40 CFR, Section 300.415 (b) (2). Specifically:

- a. Actual or potential exposure to hazardous substances or pollutants or contaminants by nearby populations, animals or food chain;

Site investigations by the U.S. EPA and TAT, and sample analytical data had identified that open drums and containers holding hazardous substances existed at the Automatic Industrial Plating site. Antimony, chromium, copper, lead, mercury, nickel, zinc, and cyanide were found and posed inhalation, ingestion and contact hazards. In addition, acid fumes emanating from the deteriorating facility threatened the surrounding residents with airborne exposure. Exposure to acid fumes can cause dermatitis and irritation to the respiratory system, nausea, and dizziness. Electroplating sludges had spilled onto the floor and corroded of the concrete floor and walls of the facility. Close proximity of business and residences, and partially restricted access allowed for potential direct contact with the hazardous materials.

- b. Hazardous substances or pollutants or contaminants in drums, barrels, and tanks, or other bulk storage containers that may pose a threat of release;

Site investigations have identified two hundred and twenty-one different size containers on-site, whose contents include chemicals or by-products used in metal plating processes. Most of the drums (ranging from 5 to 55 gallons) and vats (ranging from 100 to 3,000 gallons) were open and unsecured, and of questionable integrity. In addition, analytical data from on-site samples revealed the presence of hazardous materials that could have leaked from their containers and contaminated their surroundings.

- c. High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

Site investigations had documented chemicals associated with the electroplating process had spilled from their containers and corroded the concrete floor of the Automatic Industrial Plating facility. A pool of liquid near the center of the building registered a pH of 2 S.U. In addition, the outside brick walls appeared visibly stained at the ground level. The migration of contaminants from the floor of the facility due to the dilapidated condition of the building and from the exterior soils by airborne dusts or storm run-off was possible.

- d. Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

The walls and roof of the main building were deteriorated allowing rain water to flood the building. Excessive snow or rain could have caused significant leakage into the building resulting in migration of hazardous substances from unsound containers.

1.3.1 Natural Resource Damage

Natural Resource trustee, U.S. Fish and Wildlife Service, was notified of the planned removal actions at the Automatic Industrial Plating site. No formal assessment of Natural Resource damage was prepared for this site.

1.4 Attempts to Obtain a Response from Potential Responsible Parties

The property owner's name, Mr. Wolfgang Damsch, and phone number was recieved from the City of Schaumburg's Fire Chief. Mr. Damsch was the only party responsible for the ownership and operation of the Automatic Industrial Plating facility.

On December 20, 1991, Mr. Damsch was notified by the U.S. EPA, by telephone, regarding the need to conduct an emergency removal action at the facility. Mr. Damsch declined the opportunity to complete the removal actions due to insufficient financial means and technical incapacibilities. However, Mr. Damsch voluntarily agreed to provide the U.S. EPA and the associated contractors access to the facility and respective properties.

A letter of confirmation regarding the phone conversation was written to Mr. Damsch on January 3, 1992.

1.5 Response Actions Taken

1.5.1 Phase I

On January 7, 1992 an additional \$50,000 was verbally issued in order to prevent work stoppage on site. On January, 13, 1992 an Action Memorandum was signed by David Ullrich, Director of the Waste Management Division, confirming the verbal approval for funds totalling \$100,000 and obtaining an additional \$ 476,882 for a total project ceiling of \$ 576,882 to conduct the removal action at the Automatic Industrial Plating site.

On December 26, 1991, OSC Emmanouil, TAT and ERCS contractors were mobilized to site to conduct an emergency response action to secure

the site. Activities conducted during this phase included mitigation of all spills, overpacking and securing leaking drums and containers including the transfer of 1,500 gallons of a liquid with a pH of one standard unit. In addition, all containers were staged, inventoried and sampled. A total of 175 drums ranging in capacity from 5 to 55 gallons and 46 vats and tanks ranging from 100 to 1,500 gallons were recorded and sampled. The samples were field hazard-categorized (hazcat) and compatibility groups (waste streams) were established. The following seven compatibility groups were identified:

- Group A - Chrome Liquids
- Group B - Chrome Solids
- Group C - Hazardous Liquids
- Group D - Caustic Solids
- Group E - Cyanide Liquids
- Group F - Cyanide Solids
- Group G - Organic Liquids

Materials from the site were bulked into the respective waste stream based on the compatibility testing and staged for transportation to the approved disposal facility.

Composite samples were obtained from each waste stream and submitted for disposal parameter analysis. Following receipt of analytical data, bids were solicited for disposal cost analysis. Composite samples were submitted for disposal approval to the lowest acceptable bid for an EPA approved disposal facility.

During this phase, vats and tanks were emptied, decontaminated, dismantled and scrapped. A total of 150 cubic yards of scrap metal was transported for recycling.

In addition, a total of 90 cubic yards of contaminated debris was removed from the building. The floor of the building was decontaminated and covered with polyethylene sheeting to prevent rain water from leaching contamination from other contaminated areas. Personnel were demobilized awaiting disposal approval.

1.5.2 Phase II

On March 17, 1992, OSC Emmanouil, TAT and ERCS contractors returned to site following disposal approval of three waste composite groups. Composite Groups A (Chrome Liquids) and C (Base/Neutral Liquids) were transferred into individual tankers in order to be transported for disposal. Composite Group G (Organics) which consisted of two 55-gallon drums was also transported for disposal. The remaining drums were staged to await transportation approval.

A sample of visibly contaminated brick from the outside walls of the building, and a concrete floor core sample were submitted for

analysis. Based on the analytical results, contaminated portions of the building were determined. Cost comparisons for removal of the contaminated areas of the building versus building demolition and disposal were researched. It was determined that it would be most cost effective to demolish the building.

1.5.3 Phase III

On April 27, 1992 the U.S. EPA, TAT and ERCS contractors were returned to site to continue the disposal process for various waste streams. Composite Groups E (Cyanide Liquids) and F (Cyanide Solids) were transported in drums for incineration while the remaining drums, Groups B (Chrome Solids), D (Base/Neutral Solids) and C (Decon Water-Base/Neutral Liquids) were staged in a semi box trailer outside of the building awaiting a transportation schedule.

The building was demolished using a trackhoe and grapppler to allow for separation of the hazardous and non-hazardous portions of the building structure. A total of 520 cubic yards of non-hazardous building debris was transported to the local sanitary landfill, and an additional 40 cubic yards of steel was scrapped for recycling. Four hundred and sixty cubic yards of building materials, including the concrete floor, were removed and transported to a landfill as hazardous debris. The ground was leveled and paved with asphalt.

On May 8, 1992, a Ceiling Increase was signed by David Ulrich, Director of the Waste Management Division, for the appoval of an additional \$270,802 for the completion of the removal action.

The ERCS contractors and TAT left site on May 27, 1992, to await final approval to ship Groups B, C, and D for disposal.

1.5.4 Phase IV

On July, 9, 1992 ERCS and TAT returned to the site to transfer Group D (Caustic Solids) from the semi-box trailer onto a box truck for transport to the incineration facility. Composite Groups B (Chrome Soilds) and C (Decon Water-Hazardous Liquid) drums were transported for treatment.

All personnel and equipment were demobilized from the site since all on-site activities were completed.

Table 1 represents all waste streams transported for disposal at the Automatic Industrial Plating Company site.

TABLE 1

WASTE DISPOSAL SUMMARY
Automatic Industrial Plating
Schaumburg, Illinois

Waste Category	Quantity Shipped	Date	Manifest No.	Disposal Method	Facility/ Location
Group A RQ Hazardous Waste liquid, n.o.s. ORM-E NA9189 (D006,D007,D009, 003D)	3,789 gal.	03/23/92	MI2367782	Treatment	Dynecol Detroit, MI
Group B RQ Hazardous Waste solid	8,750 lbs	07/09/92	MI279180	Treatment	Dynecol Detroit, MI
Group C RQ,Hazardous Waste liquid, n.o.s. ORM-E NA9189 (D006,D007)	2,842 gal.	03/19/92	MI2367773	Treatment	Dynecol Detroit, MI
	900 gal.	07/09/92	MI279180	Treatment	Dynecol, Detroit, MI
Group D RQ Waste Corrosive solid,	6,300 lbs.	07/09/92	16902	Incineration	ThermalKem Rock Hill, SC
Group E RQ Waste Corrosive Liquid, Poisonous, n.o.s Corrosive UN2922 (D002,D003,D007,F002,F007)	1,265 gal.	04/27/92	00005	Incineration	ThermalKem Rock Hill, SC

TABLE 1 (Cont'd)

WASTE DISPOSAL SUMMARY
Automatic Industrial Plating
Schaumburg, Illinois

<u>Waste Category</u>	<u>Quantity Shipped</u>	<u>Date</u>	<u>Manifest No.</u>	<u>Disposal Method</u>	<u>Facility/ Location</u>
Group F RQ Waste Cyanide Mixture, Dry, n.o.s Poison B UN1588 (D003,D007,F002,F007,F008)	10,100 lbs.	04/27/92	00005	Incineration	ThermalKem Rock Hill, SC
Group G RQ Waste Combustible liquid, n.o.s Combustible NA1993	165 gal.	03/19/92	IL4588360	Fuels Blending	Ecolotec Dayton, Ohio
RCRA crushed empty drums and containers non-hazardous	20 yd3	03/25/92	IL4588364	Landfill	Envirosafe Oregon, Ohio
	20 yd3	04/10/92	IL4588365	Landfill	Envirosafe Oregon, Ohio
Debris RQ Hazardous Waste, solid, n.o.s ORM-E NA9189 (D007)	20 yd3	04/27/92	IL3757867	Treatment/ Landfill	Envirosafe Oregon, Ohio
	20 yd3	04/28/92	IL3757868		
	20 yd3	05/01/92	IL3757869		
	20 yd3	05/01/92	IL3839591		
	20 yd3	05/02/92	IL3839557		
	20 yd3	05/04/92	IL3868705		
	20 yd3	05/05/92	IL3868706		
	20 yd3	05/05/92	IL3868707		
	20 yd3	05/06/92	IL3868708		
	20 yd3	05/06/92	IL3868709		
	40 yd3	05/06/92	IL4106495		

TABLE 1 (Cont'd)

WASTE DISPOSAL SUMMARY
Automatic Industrial Plating
Schaumburg, Illinois

<u>Waste Category</u>	<u>Quantity Shipped</u>	<u>Date</u>	<u>Manifest No.</u>	<u>Disposal Method</u>	<u>Facility/ Location</u>
Debris					
RQ Hazardous Waste,	40 yd3	05/06/92	IL4106497	Treatment/ Landfill	Envirosafe Oregon, Ohio
solid, n.o.s.	11 yd3	05/21/92	IL3868711		
ORM-E NA9189	20 yd3	05/21/92	IL3868718		
(D007)	20 yd3	05/26/92	IL4650359		
	15 yd3	05/27/92	IL3868713		
	19 yd3	05/27/92	IL3868712		
	20 yd3	05/27/92	IL3868717		
	15 yd3	05/27/92	IL3868719		
	16 yd3	05/28/92	IL4106500		

1.6 Community Relations

No formal community relations plan for the Automatic Industrial Plating site was constructed. However, the OSC frequently informed local officials and residents of progress during the cleanup.

1.7 Cost Summary

OH Materials Corporation, subcontracted by the prime ERCS contractors (IT), performed all on-site activities at Automatic Industrial Plating (D.O.#7460-05-208). Daily expenditures for OH Materials totaled \$618,237 for the duration of the removal project. TAT contractor E&E provided technical assistance under TDD #'s T05-9112-030A-D and T05-9210-117A-C. A summary of total removal costs is provided in Table 2. These costs are estimated, subject to audit and final definitization by the U.S. EPA. This OSC Report is not intended to be a final reconciliation of all costs associated with the Automatic Industrial Plating site.

2.0 **EFFECTIVENESS OF REMOVAL ACTIONS**

2.1 Responsible Party

There was no Potential Responsible Party (PRP) removal at the Automatic Industrial Plating site. See section 1.4 for a discussion on attempts to contact a PRP.

2.2 State and Local Agencies

The IEPA investigated the Automatic Industrial Plating site in December, 1991, following complaints from the local fire department and the Metropolitan Water Reclamation District of Greater Chicago. The IEPA informed Mr. Damsch of apparent violations of the Illinois Environmental Protection Act, and referred the site to the U.S. EPA on December 19, 1991. No further assistance was given by state agencies during the removal. The local police station regularly patrolled the area in order to verify site security. OSC Emmanouil informed state and local agencies of progress of removal activities through frequent correspondence and pollution reports.

2.3 Federal Agencies and Special Teams

No agency other than the U.S. EPA participated in the removal activities at the Automatic Industrial Plating site.

TABLE 2
SUMMARY OF TOTAL REMOVAL COSTS
Automatic Industrial Plating

12/26/91-07/09/92

EXTRAMURAL COSTS:

ERCS Contractor (1)	\$ 618,237.07
Labor/Travel/Subsistence	\$ 216,898.33
Equipment	\$ 37,759.73
Materials	\$ 37,382.20
Transportation	\$ 26,094.63
Disposal	\$ 148,144.20
Subcontractors	\$ 195,913.18
CSR Adjustment	\$ 43,955.20
TAT Contractor (2)	\$ 79,825.43
Subtotal	\$ 698,062.50

INTRAMURAL COSTS:

U.S. EPA, OSC - Direct Costs (3)	\$ 20,002.50
Subtotal	\$ 20,002.50
ESTIMATED TOTAL PROJECT COSTS	\$ 718,065.00
PROJECT CEILING	\$ 846,972.00

- (1) Source: ERCS Contractor PEI/ITEP, Final Invoice # 1208-6 from August 2, 1993 (Appendix 2E)
- (2) Source: TDD #05-9112-030, 05-9112-030A-D, 05-9210-117, 05-9210-117A-C
- (3) Source: September 16, 1992 Cost Summary, (Appendix 2D)

Any indication of specific costs incurred at the site is only an approximation, subject to audit and final definitization by the U.S. EPA. The OSC Report is not meant to be a final reconciliation of the costs associated with a particular site.

2.4 Contractors

The ERCS contractors conducted cleanup responsibilities thoroughly and cost-effectively in accordance with the OSC's requests. TAT contractors performed tasks as set in TDD #'s T05-9112-030, T05-9112-030 A-D and T05-9210-117, T05-9210-117 A-C in a timely and efficient manner.

3.0 **DIFFICULTIES ENCOUNTERED**

No difficulties occurred during this removal.

4.0 **RECOMMENDATIONS**

Removal of hazardous materials and the building structure effectively mitigated threats to human health and the environment posed by hazardous materials at the Automatic Industrial Plating site.